

IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION

TGIP, INC.,	§	
	§	
<i>Plaintiff,</i>	§	
	§	Civil Action No. 2:06-CV-105
v.	§	
	§	
AT&T CORP, ET. AL.,	§	JUDGE RON CLARK
	§	
<i>Defendants.</i>	§	
	§	

**MEMORANDUM OPINION AND ORDER
ON DEFENDANTS' MOTION FOR PARTIAL SUMMARY JUDGMENT**

Plaintiff TGIP ("TGIP") filed suit against Defendants AT&T Corp., Bell Atlantic Communications, Verizon Select Services, Inc., MCI Communication Services, Inc., Verizon Business Network Teleconnect Long Distance Services & Systems Company, IDT Corporation, U.S. South Communications, Inc., Interactive Communications International, Inc., Pre Holdings, Inc., and Pre Solutions, Inc. (collectively "Defendants") claiming infringement of United States Patent No. 5,511,114 ("the '114 patent") and United States Patent No. 5,721,768 ("the '768 patent"). Defendants filed a Motion for Partial Summary Judgment Based on Indefiniteness [Doc. # 219]. Defendants argue that three means-plus-function clauses fail to recite sufficient structure, and so are indefinite and invalid. These clauses are: (1) Means for associating, used in Claims 1 and 6 of the '114 patent; (2) Means for billing, used in Claim 7 of the '768 patent; and (3) Means for authorizing, used in Claim 7 of the '114 patent.

With regard to the first two clauses, Defendants failed to show by clear and convincing evidence that sufficient structure was not disclosed. Summary judgment is denied as to these

claims. With regard to the third clause, Defendants correctly point out that there is no link or connection between any disclosed structure and the claimed function. Summary judgment, therefore, is proper as to this claim.

I. Patent Background and Technology

The ' 114 patent

The '114 patent relates to a prepaid calling card system having a remote terminal to provide on-site activation and re-charging of calling cards. The system includes four main functional components: a plurality of calling cards; a host computer; a plurality of on-site activation terminals; and a call processor. Each of the calling cards preferably includes a body portion and a read-only memory stripe with a stored security number. The main management and processing of the system is accomplished by the host computer, which is capable of connecting to the telephone network. The host computer includes a database for storing security numbers associated with authorized calling cards. The data terminals are remote from the host computer and are capable of being connected for transmitting data between the terminals and the host computer. The call processor is controlled by the host computer for connecting one or more customers to the telephone network using the authorized calling cards.

The ' 768 patent

The '768 patent is a continuation in part of the '114 patent. Focusing on the ways in which it is different from the '114 patent, the '768 patent discusses an alternative embodiment not discussed in the '114 patent, whereby a user may activate or recharge a pre-paid card account with an authorized dollar amount at a user activation terminal. The pre-paid card account may then be used to purchase various goods and services up to the authorized dollar amount. The

activation terminals are connected to a main processor, which includes a host computer responsible for management and processing of the system through a purchasing network. The host computer includes a data base for storing security numbers associated with authorized card accounts and enables users to purchase goods and services up to authorized dollar amounts using the authorized pre-paid card accounts.

II. Standard of Review for Summary Judgment

The party moving for summary judgment under Fed. R. Civ. P. 56 has the initial burden of demonstrating that there is no genuine issue as to any material fact and that it is entitled to judgment as a matter of law. *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 256, 106 S. Ct. 2505, 2514 (1986). Movant may show that the undisputed material facts affirmatively establish a right to judgment. Alternatively, movant may establish that the other party has the burden of proof at trial, and has failed to “make a showing sufficient to establish the existence of an element essential to [its] case.” *Celotex Corp. v. Catrett*, 477 U.S. 317, 322-23, 106 S. Ct. 2548, 2522 (1986).

In order to avoid summary judgment, the party opposing the motion must come forward with competent summary judgment evidence of the existence of a genuine fact issue. *See Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574, 585-86, 106 S. Ct. 1348, 1335 (1986); *Anderson*, 477 U.S. at 257, 106 S. Ct. at 2514. The nonmoving party “must do more than simply show that there is some metaphysical doubt as to the material facts.” *Matsushita*, 475 U.S. at 586, 106 S. Ct. at 1356. Fed. R. Civ. P. 56 requires that the nonmoving party set forth specific facts showing that there is a genuine issue for trial. *Anderson*, 477 U.S. at 256, 106 S. Ct. at 2514. Only a genuine dispute over a material fact (a fact which might affect the

outcome of the suit under the governing substantive law) will preclude summary judgment.

Anderson, 477 U.S. at 248, 106 S. Ct. at 2510. The dispute is genuine if the evidence is such that a reasonable jury could return a verdict for the nonmoving party on the issue. *Id.* If the factual context renders a claim implausible (for example if the claim simply makes no economic sense) nonmovants “must come forward with more persuasive evidence to support their claim than would otherwise be necessary.” *Matsushita*, 475 U.S. at 587, 106 S. Ct. at 1356.

Fed. R. Civ. P. 56(c) requires the court to look at the full record, including the pleadings, depositions, answers to interrogatories, admissions, and affidavits. All reasonable inferences to be drawn from the underlying facts must be viewed in the light most favorable to the party opposing the motion, and any doubt must be resolved in its favor. *Matsushita*, 475 U.S. at 587, 106 S. Ct. at 1356. However, only *reasonable* inferences in favor of the nonmoving party can be drawn from the evidence. *Eastman Kodak Co. v. Image Tech. Servs., Inc.*, 504 U.S. 451, 468, 112 S. Ct. 2072, 2083 (1992).

III. Law on Indefiniteness and Means-Plus-Function Terms

The law presumes a patent to be valid. It is Defendants’ burden, to prove by clear and convincing evidence, that the claims are invalid. 35 U.S.C. § 282; *Intel Corp. v. VIA Techs., Inc.*, 319 F.3d 1357, 1366 (Fed. Cir. 2003). “In ruling on a claim of patent indefiniteness, a court must determine whether those skilled in the art would understand what is claimed when the claim is read in light of the specification.” *Bancorp Servs., LLC v. Hartford Life Ins. Co.*, 359 F.3d

1367, 1371 (Fed. Cir. 2004).¹

Defendants contend that the claims at issue in this motion are means-plus-function clauses under 35 U.S.C. § 112(6). Determining the claimed function and the corresponding structure of means-plus-function clauses are matters of claim construction. *WMS Gaming Inc., v. Int'l Game Tech.*, 184 F.3d 1339, 1347 (Fed. Cir. 1999). Claim construction of a means-plus-function limitation involves two steps. *See Medical Instrumentation and Diagnostics v. Elekta*, 344 F.3d 1205, 1210 (Fed. Cir. 2003). The court must first identify the particular claimed function, and then look to the specification and identify the corresponding structure for that function. *Id.* “Under this second step, ‘structure disclosed in the specification is corresponding structure only if the specification or prosecution history clearly links or associates that structure to the function recited in the claim.’” *Id.* (citations omitted). “While corresponding structure need not include all things necessary to enable the claimed invention to work, it must include all structure that actually performs the recited function.” *Default Proof Credit Card System, Inc. v. Home Depot U.S.A., Inc.*, 412 F.3d 1291, 1298 (Fed. Cir. 2005).

IV. Analysis

Defendants argue that three clauses in the '114 patent and the '768 patent are means-plus-function clauses and that these clauses fail to identify sufficient structure.

¹ The court defined “one of ordinary skill in the art” in this case as someone with the equivalent of a “four-year” degree from an accredited institution (usually denoted in this country as a B.S or a B.A. degree) in a field such as engineering or computer science with courses covering technical aspects of communication systems and computer systems, or a minimum of two years experience in developing calling card products for the calling card industry. *See* Memorandum Opinion and Order Construing Claim Terms of United States Patent No. 5,511,114 and No. 5,721,768, p.2 n.2 [Doc. # 238].

1. **“Means for associating of the data terminal.”** Used in `114 patent, Claim 1.

“Means for associating of each data terminal.” Used in `114 patent, Claim 6.

To assist in the analysis, the relevant portion of the Claim 1 is set out with the terms at issue in bold:

. . . at least one data terminal located at a predetermined location remote from the host computer and connectable to the input port for associating, at the host computer, an amount of call authorization to a security number of a calling card using data transmitted between the data terminal and the host computer during one or more charging transactions, the **means for associating of the data terminal including:**

means for entering the security number;

means, operative during any initial transaction and any recharge transaction, for entering any monetary amount corresponding to the amount of call authorization;

means for connecting to the host computer to transfer the security number and the call authorization amount; and

means responsive to the transfer for receiving a verification message from the host computer authorizing receipt of the monetary amount to thereby associate at the host computer the call authorization amount to the security number, wherein the calling card does not store the call authorization amount

As a threshold matter, TGIP argues that the terms at issue are merely a transitional phrase, and not a means-plus-function clause. While TGIP points out that the initial patent application did not contain the “means for” limitation, the patentee chose to amend the claim and include this limitation. *See* Amendment to First Office Action, 6/29/1995, p. 2, Ex. C to TGIP’s Responsive to Defendants’ Motion for Summary Judgment [Doc. # 234, Attachment # 3, p. 2 of 11]. Where a claim includes the word “means,” a presumption is invoked that § 112(6) applies. *See Harris Corp. v. Ericsson Inc.*, 417 F.3d 1241, 1248 (Fed. Cir. 2005). This presumption may be rebutted if the claim recites “sufficient structure for performing the claimed function” *Id.*

TGIP contends that the four means-plus-function clauses following “including” disclose sufficient structure for performing the claimed function. Neither party cites cases directly addressing this issue, and the court was unable to find any. In instances where the structure disclosed in the claim is actually listed in the claim (e.g. “including a nozzle and a venturi tube in alignment with the nozzle”), the Federal Circuit has found the presumption to be rebutted. *See TI Group Automotive Sys., Inc. v. VDO North America, LLC*, 375 F.3d 1126, 1135 (Fed. Cir. 2004).

The difference here is that four means-plus-function terms are claimed to be the structure. In order to determine the structure disclosed for these four claims, one must look to the structure in the specification. Given the presumption that this term is a means-plus-function term, therefore, the court will treat this clause as falling under Section 112(6).

As stated, the structure for “means for associating of the data terminal” is described as being the combination of means plus function terms. *See* ‘114 patent, col. 6, l. 19. Defendants argue that this construction makes the term “means for associating” meaningless because the term is defined by other claim terms. This argument reaches too far. The construction of “means for associating” is not actually the same as any other claim term – it is defined by a group of claim terms acting in conjunction. To accept Defendants’ argument would mean that every time a term is defined by a list of items acting in conjunction that claim term itself is indefinite. This cannot be true. *See TI Group Automotive Sys., Inc.*, 375 F.3d at 1135.

TGIP argues in the alternative that the function is “associating, at the host computer, an amount of call authorization to a security number of a calling card.” Defendants chose not to favor the court with any attempt to identify or describe the claimed function. They also do not claim that no function is described or disclosed. They merely refer repeatedly to “the means for

associating” function. Since they cannot identify or describe the function, it is difficult for Defendants to meet their burden to prove by clear and convincing evidence that no structure is disclosed.

Based upon the definitions of terms to which the parties agreed, the definitions set out in the Claim Construction Order, and the ordinary meaning of words as understood by one of ordinary skill in the art, the court concludes that the function is: “associating, at the host computer, an amount of call authorization to a security number of a calling card.”

The structure is the structure corresponding to the four other means plus function terms of Claim 1. The court has identified the corresponding structure for the first two terms “means for entering the security number,” and “means, operative during any initial transaction and any recharge transaction, for entering any monetary amount corresponding to the amount of call authorization” to be “(1) a keypad; (2) a cardreader; (3) an optical scanner; and (4) a voice recognition card connected to a microphone for providing limited speaker-independent or speaker-dependent discrete or continuous voice recognition.” Claim Construction Order, p. 26 [Doc. # 238].

As to the third term, “means for connecting to the host computer,” the specification states “means (such as a modem) for connecting to the host computer to transfer the security number, the call authorization amount and the data terminal identification.” ‘114 patent, col. 4, ll. 22-24. The specification provides this may be by wireless connection as well as telephone. ‘114 patent, col. 4, ll. 40-42. Therefore, the court finds the corresponding structure for the function is “a modem, either wireless or hardwired.” *See* IEEE STANDARD DICTIONARY OF ELECTRICAL AND ELECTRONICS TERMS (6th ed. 1996) (defining “hardwired” as “pertaining to a circuit or device

whose characteristics are permanently determined by the interconnections between components.”)

For the fourth term, “means responsive to the transfer,” the specification describes “means (such as a display) for receiving and displaying a verification message from the host computer authorizing receipt of the monetary amount.” `114 patent, col. 4, ll. 24-27. The display may be visual or aural. `114 patent, col. 4, ll. 42-43. The structure is, therefore, an aural or visual display.

Defendants also rely on the rule that if a function in a claim term governed by 35 U.S.C. § 112(6) is performed by software or a “special purpose computer,” an algorithm must be described in the specification. Yet, Defendants’ motion, exhibits, and reply brief fail to explain what function is performed by software for which there is no algorithm. On the record before it, the court cannot conclude that Defendants have shown by clear and convincing evidence that the claim is indefinite.

2. “Means for billing a given distributor for the pre-paid calling card accounts so activated and associated with the given distributor” `768 patent, sixth means term of Claim 7.

In relevant part, Claim 7 states:

means for billing a given distributor for the pre-paid calling card accounts so activated and associated with the given distributor as indicated by information maintained in the database.

Both parties agree that this is a means-plus-function term governed by 35 U.S.C. § 112(6). TGIP states that the function is “billing a given distributor for the pre-paid calling card accounts so activated and associated with the given distributor as indicated by information

maintained in the database.” As with the previous term, Defendants did not identify or describe the claimed function, nor did they claim that no function is described or disclosed. Defendants only refer to “the means for billing” or just “billing” function.

Nothing in the specification indicates that the words in this means term has a special meaning. One of the possible uses of the patents at issue is to generate billing information for each retailer so transactions can be reconciled. `114 patent, col. 2, ll. 66 - col. 3, l. 5; `768 patent, col. 2, l. 67- col. 3, l. 6. This reduces the risk to the retailer inherent in acquiring pre-charged cards which might be stolen. The retailer is billed only for cards sold or “authorized.” See Stimson, “Prepaid Calling Cards – Friend or Foe?” *as found in Public Communications Magazine*, pp. 18-20 (Aug. 1994).

Based on the foregoing, and the common meaning of the words, the court concludes that the function is: “billing a given distributor for the pre-paid calling card accounts so activated and associated with the given distributor as indicated by information maintained in the database.”

TGIP proposes that the corresponding structure is “a computer with access to, or a computer that is provided with, information stored in the database of pre-paid calling card accounts, or any equivalents.”

Defendants argue that the specification fails to disclose sufficient structure. This argument focuses on two points: (1) the specification fails to disclose a computer which may perform the recited function, and (2) to the extent the specification contemplates a computer for performing the recited “billing” function, no algorithm is disclosed.

[T]he host computer is a general purpose x86-type personal computer running a multi-tasking operation system such as UNIX. Alternatively, the host computer is implemented with any WINDOWS-based operating system. The host computer has

sufficient storage associated therewith to enable a call record to be maintained for every authorized calling card in the system. The call record format will be described below.

`768 patent, col. 4, ll. 8-14.

The call record includes a number of pieces of information:

the calling card security number, the identity of the store at which the card was issued . . . the card's issue date and time, the card's last use date and time, the card's last recharge store number . . . the card's balance (\$xxx.xx), the card's last recharge amount, a "card-in-use" flag and the card's last recharge date and time. By keeping track of the data terminals at which a card is initially authorized and later recharged, the system operator can reconcile multiple data from different store locations. This enables the system operator to credit or charge store operators for recharging provided by other store operators in the system.

`768 patent, col. 5, ll. 26-41.

The system, which includes the host computer, *see* col. 3, ll 57-60, is described as being capable of generating:

accounting and/or billing information so that [the] system operator can determine which data terminal operator authorized and/or recharged a particular calling card. This enables the system operator to reconcile all transactions.

`768 patent, col. 5, ll. 1-5. Defendants have not shown that one skilled in the art would not be able to link the recited function with the disclosed system, which specifically includes the host computer, in the specification. Defendants have also failed to show that the specification does not adequately disclose the necessary algorithm.²

The court, therefore, cannot conclude for summary judgment purposes that Defendants have shown by clear and convincing evidence that this claim is indefinite and invalid.

²An algorithm does not always have to be a precise mathematical formula. *See Finsar Corp. v. DirecTV, Inc.*, 416 F.Supp.2d 512, 518-19 (E.D. Tex. 2006). The specification identifies a specific commercial operating system and the data to be included.

3. “Means for authorizing calling card security numbers in selectable call authorization amounts.” Used in `114 patent, Claim 7.

Claim 7 of the `114 patent states, with the disputed terms in bold:

A calling card system comprising:

. . . a plurality of data terminals connectable to the host computer, each data terminal identified by a data terminal identification code and including **means for authorizing calling card security numbers in selectable call authorization amounts** . . .

The parties agree, and the court finds, that this is a means-plus-function term governed by 35 U.S.C. § 112 (6). TGIP states that the function is “authorizing calling card security numbers in call authorization amounts selectable by the customer.” Defendants neither suggested any alternative function, nor stated that there is no function.

The specification, and the prosecution history, do not indicate that the words in this means-plus-function clause have a special meaning.

The data terminal allows for variable authorization and recharging of a calling card. When the cardreader cannot detect the security number stored in the memory . . . the data terminal operator may enter the security number using the keypad to enable point-of-sale activation or recharging of the card. By keeping track of the security number and the identification of the authorizing data terminal, the system can generate accounting and/or billing information so that [the] system operator can determine which data terminal operator authorized and/or recharged a particular calling card.

`114 patent, col. 2, l. 60 - col. 3, l. 4; *see also* `114 patent, col. 4, ll. 44-50. Based upon the specification, the definitions set out in the Claim Construction Order, and the ordinary meaning of the terms to one skilled in the art, the court concludes that the function is: “authorizing calling card security numbers in call authorization amounts selectable by the customer.”

TGIP argues that the corresponding structure is “a keypad, cardreader, optical scanner,

voice recognition card connected to a microphone for providing limited speaker-independent or speaker-dependent discrete or continuous voice recognition, or equivalents for entering and/or reading the security number and/or call authorization amount; and a data terminal, on-site activation terminal, Verifone Model XL 300, modem, or equivalents for transferring the security number and/or call authorization amount to the host computer, or any equivalents of the above.”

Claim 7 is the only independent claim in the `114 patent which does not refer to “associating.” The parties agree that the “means for authorizing” structure must be included in the data terminal. TGIP’s argument is based on fact that the data terminal is described as including “a number of functional components.” `114 patent, col. 3, l. 67-col. 4, l. 1. Among these are the means for reading a calling card (such as a cardreader), means for entering any monetary amount corresponding to an amount of call authorization associated with a particular calling card (such as a keypad), means for dialing the host computer to transfer the security number (such as a modem), and means for receiving and displaying a verification message from the host computer authorizing the receipt of the monetary amount (such as a display). `114 patent, col. 2, ll. 49-59; `114 patent, col. 4, ll. 17-29. These are the same structural components which TGIP states correspond to the “means for associating” clause, discussed above. Neither the specification nor the claims discuss “means for authorizing” in context with these structural components.

TGIP has argued that Claim 7 is different because it does not include the function of “associating, at the host computer, an amount of call authorization to a security number,”³ as

³The arguments concerning, and the meaning of, this term are set out in the Claim Construction Order, pp. 7-12 [Doc. # 238].

found in Claims 1 and 6. *See* TGIP's Supp. Br., pp. 2-3[Doc. # 229-1, pp. 3-4 of 12]; Markman Tr. pp. 75-78. In contrast, before the PTO, the patentee argued that there was no difference between Claims 1 and 7. *See* Amendment to First Office Action, 5/18/1995, p. 9 (Bates No. TGIP 006429), Ex. 7 to Defendants' Responsive Brief [Doc. # 207, Attachment # 7, p. 10 of 11](emphasis added); Claim Construction Order, p. 12 [Doc. # 238].

TGIP cannot "have its cake and eat it, too." If Claim 7 is so different from Claim 1, then what is the corresponding structure? TGIP proposes only the same structure as the "means for associating" clause in Claim 1. The associating function and the authorizing function, however, are not mentioned or discussed as being similar in the patent. Absent some connection, or at least some similarity, between the two, there is no basis for one skilled in the art to conclude that the corresponding structure is the same.

There is also no basis to assume that a skilled artisan would be able to tell how the authorizing function is accomplished, or what the limitations of the claim are, from TGIP's proposed structure. As noted above, TGIP's proposed structure relates to means for reading a calling card, means for entering any monetary amount, means for dialing the host computer, and means for receiving and displaying. There is nothing in the specification or the claims which clearly links the authorizing function to these proposed structures. This is consistent with TGIP's position that the clauses in Claims 1 and 7 are very different, and that they perform different functions. Because it is not possible to clearly identify the corresponding structure, there is no way for one skilled in the art to meaningfully determine the limitations of the "means for authorization" clause.

Additionally, if Claim 7 is the same as Claim 1, then “means for authorizing” would simply be synonymous with “means for associating.” This would effectively collapse the two claims and would violate the principal of claim differentiation. *See Free Motion Fitness, Inc. v. Cybex Intern., Inc.*, 423 F.3d 1343, 1351 (Fed. Cir. 2005)(“the difference in meaning and scope between claims is presumed to be significant.”). Notably, TGIP does not suggest this argument in its response.

While TGIP insists that Claim 7 and Claim 1 are different because Claim 7 does not refer to “associating,” TGIP proposes the exact same structure for both of these claims without reconciling, or accounting for, how the same structure would perform these different functions. There is no evidence that one skilled in the art would be able to determine that the structure suggested by TGIP corresponds to the authorizing function. The court concludes that this claim is indefinite and so invalid.

IV. Conclusion

IT IS THEREFORE ORDERED that Defendants’ Motion for Partial Summary Based on Indefiniteness [**Doc. # 219**] is **GRANTED IN PART AND DENIED IN PART** as follows:

- (1) Defendants failed to show by clear and convincing evidence that Claims 1 and 6 of the ` 114 patent, and Claim 7 of the ` 768 patent are invalid; and
- (2) Defendants have shown that Claim 7 of the ` 114 patent is invalid.

So **ORDERED** and **SIGNED** this **16** day of **May, 2007**.



Ron Clark, United States District Judge